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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,149	03/27/2002	Tsutomu Nakada	221180US2PCT	9792
22850	7590	03/11/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PENDLETON, BRIAN T	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,149

Applicant(s)

NAKADA, TSUTOMU

Examiner

Brian T. Pendleton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki et al, US Patent 6,128,517 in view of John et al, US Patent Application Publication 2002/0091335. Maki discloses an optical system for measuring the cerebral circulation blood flow of an user comprising a probe section having radiation fibers 5a, 5b and light receiving fibers 7a – 7d, a control device 11 which is coupled to a laser light source 2a – 2d through an inherent lead wire, photodetectors 8a-8f acting as optical detectors connected to the fibers 7a-7d, the control device 11 having means for detecting a change in cerebral circulation based on the data output from the probes on the user. Maki does not disclose converting the change in cerebral circulation blood flow to sound pulses by a sound source device, a pair of lead wires and receivers connected to the sound source device and auscultation is performed based on the sound pulses. John discloses a brain stethoscope in figures 2 and 3 comprising a patient having electrodes 50 placed on the head and transmitting data from the electrodes to a hand-held receiver 60 having earphones 68. As disclosed in paragraphs 73 and 74, a series of tones based on the brain activity of the patient is generated in the earphones 68. Auscultation is done based on the intensity of the sequence of the tones. Thus, John discloses a sound source device for converting brain activity to sound pulses, receivers connected to the sound source device and auscultation performed based on the

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sound pulses. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Maki, per the teachings of John, creating a for the purpose of generating an audible tone of cerebral circulation blood which can improve the time for accurate assessment of cerebral blood flow activity. Claims 1 and 5 are met. As to claim 2, the combination provides for two wavelengths.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki in view of John as applied to claim 1 above, and further in view of Chance, US Patent 6,708,048. The combination of Maki and John does not disclose three wavelengths. Chance discloses a spectrophotometer for determining the concentration of hemoglobin in biological tissue comprising light sources 22a-22c having three wavelengths. Thus, it was well known and practiced in the art to use three wavelengths in the art of oxymetry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a third wavelength in the combination of Maki and John for the purpose of improving the precision of measurement. As to claim 4, one of ordinary skill in the art would have included the claimed specific wavelengths without undue experimentation as they represented appropriate wavelengths for the parameter being measured.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tobler et al, US Patent 6,285,896.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton
Examiner
Art Unit 2644

btp

